

Table I - Conversion Costs

Type of Facility	Urban	Suburban	Rural
Heavy Commercial District/Boulevard	(1)	Not Applicable	Not Applicable
Three Phase Bulk Feeder	Included Above	(2)	(2)
Three Phase Primary Tap (3)	Included Above	(3)	(3)
Single Phase Primary Tap (3)	Not Applicable	(3)	(3)
Services (cost per service) (4)	Not Applicable	(5)	(6)

Assumptions

- Rural scale 1"=190'; Suburban scale 1"=200'
- All estimates based on construction methods designated by utility, including directional boring, trenching, landscaping
- Estimates to include material cost and associated labor to convert from existing OH to UG
- Costs include installation of UG facilities, plus removal and rearrangement of overhead facilities
- Street light circuit cost are excluded (unless noted otherwise on estimate)
- The primary voltage will be the predominant voltage used by the utility
- Provide a list of assumptions, materials and work methods for each estimate
- Cost to be converted to a per mile cost, based on length of existing OH primary circuit
- Specify type and size of facilities used
- Cost to include conversion of existing overhead transformers and services (commercial and residential)
- Include cost for switchgear to connect single and three phase tap (branch) lines
- Exclude cost of converting tap lines (end circuit in switchgear)
- Design UG circuits with back-feed capability
- See notes below for further instructions:
- (1) Based on converting three phase overhead facilities along city blocks to UG:
 - Estimated based on a recent project (2001 or later) completed by the utility
 - Prefer projects in larger cities (i.e., Charlotte, Richmond, Raleigh, etc.)
- (2) Based on converting three phase OH feeder circuit to UG (per drawing sample provided)
 - UG circuit with duct bank for suburban design (assume feeder tie to UG circuit)
 - Suburban feeder Hwy 70 to Mechanical to Hwy 401 – end of map
 - OH circuit for on rural feeder is radial feed – provide loop feed back to origin
 - Rural bulk feeder utilize Hwy 50
- (3) Based on converting existing OH single and three phase branch circuits to UG
 - Utilize 1/0 UG circuits with closed loop
 - Suburban single phase circuit on Vester, Winterlochen and Jessup (assume 15 driveways each residential lot)
 - Suburban three phase circuit on Mechanical to McCormack and Hwy 70 @ Pep Boys to Drexmere. Close loop along Drexmere and McCormack Roads (assume 20' paved driveways on each commercial lot and 15' on residential)
 - Rural three phase tap utilize Hwy 50 (same as bulk feeder)
 - Rural single phase tap, utilize entire circuit feeding south to Parkers Mill Road (looped circuit)
- (4) Single Phase Residential Services
- (5) 150 foot service
- (6) 250 foot service